services or the family physician. In British Columbia the Department of Pædiatrics, Faculty of Medicine, has been officially designated as Consultant in Child Care to the Health Branch, Department of Health and Welfare, Province of British Columbia. This development has been of untold benefit to the people of British Columbia, and most other provinces in Canada would do well to consider a similar appointment.

Finally, one wonders why the department of public health in a Canadian university, or a group of Canadian authorities on public health, have not published a textbook on the subject. There is an urgent need for such a textbook with a Canadian viewpoint, since today the accepted texts are British or American and neither has any concept of the organization or administration of health services across Canada. It is known that in the field of pædiatrics such a textbook is now being prepared by pædiatric authorities across Canada. The need is even greater in the field of public health for such a textbook for the use of the future physicians of Canada.

In conclusion, it appears that many teachers of preventive medicine today are living in ivory towers; contact has been lost with the sister clinical department, the needs of the community in medical-care planning are being neglected and, finally, medical students are being graduated without any concept of their over-all responsibility to the people of Canada.

A few of us, whether we represent teachers or practitioners of public health, have a tendency to believe that our work is self-sufficient. Stuart Chase has described the danger of this type of thinking in these words:

"We will become like soldiers lying in isolated foxholes without means of communication . . . yet the social sciences are concerned with different species of the same critter—man—and the notion that we can abstract the medical, the economic or psychological aspect of his behaviour without regard to the rest is utter nonsense."[4]

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3. DICKINSON, F. G. AND WELKER, E. L.: Bulletin 64, Bureau of Medical Economic Research, American Medical Association, 1948.
4. CHASE, S.: The proper study of mankind, Harper & Brothers, New York, 1948, p. 45.

CORRIGENDUM

In the article entitled "Acute Stenosis of the Right Ventricle Following Septal Infarction" by H. J. Dempsey and R. P. Carere, published in the issue of February 1 (74: 212, 1956), lines 9 and 10 of the fifth paragraph of the description of the case (page 212, second column) should read: "and diastolic murmur was now heard in the left fourth and fifth intercostal spaces near the sternum. A few scattered fine moist rales were heard at both lung bases."

Clinical and Laboratory Notes

THE INFLUENCE OF METEOROLOGICAL FACTORS ON CERTAIN BIOLOGICAL EXPERIMENTS*

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THAT METEOROTROPIC FACTORS may influence and alter medical as well as surgical procedures has been stressed since the time of Hippocrates.[9] The aim of this paper is to illustrate briefly how sudden changes in barometric pressure can affect the outcome of certain biological or pharmacological experiments.

Toxicity studies where tadpoles (larvæ) of different species of frogs have been used are described in the literature,[1] but so far no data are available to show how such experiments are subject to meteorotropic influences. Our example illustrating this point refers to experiments performed with the larvæ of the South African frog *Xenopus lævis* Daudin.

Previously it had been reported that ammonia appears to be one of the main toxic factors in the urine of schizophrenics[1] as measured by the *Xenopus* larvæ test.[2] The toxicity‡ of urine of schizophrenics and healthy controls could be related to their ammonia content, which we determined independently. It was also found that the toxicity of urine diminishes significantly if the latter is adjusted to pH 7.5 and boiled for a half hour. The concentration range 2.5-5 mg. % of ammonia, administered as ammonium chloride to the larvæ, caused a mortality of 50-100% in 24 hours; this was also the range of concentration in urine which we have found to be toxic.

According to our observations in performing hundreds of toxicity experiments, the death of larvæ in the urine-water milieu always occurs after a time lag. Munro[3] has shown that the main nitrogen excretion product of *Xenopus* larvæ is ammonia; hence the metabolism of the larvæ alkalinizes the experimental urine-water milieu (we measured in 1,000 c.c. of water with 30 tadpoles 14 days of age, raised and kept at 20° C., pH shifts in 24 hours as high as 1.0 unit, e.g. from pH 7.4 to 8.4), and thus the previously "bound" basic volatile substances of the urine liberated—ammonia being the main component among them—kill the tadpoles.

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‡The sensitivity of the larvæ was measured on each experimental day by exposing them to standard concentrations of aqueous mescaline hydrochloride.